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# **Health and Human Services**

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## Storm Fact Sheet

### Flooding

If a person must come into contact with the floodwater they should take the following general precautions:

- Keep all children and pets out of the floodwater.
- · Check in on elderly or chronically ill neighbors to make sure that they are safe.
- Wear waterproof boots, gloves, eye protection and clothes that are either water resistant or disposable.
- Make sure all gas and electric utilities to the affected area are turned off by appropriate persons before you enter.
- Keep contact time with flood waters to a minimum and avoid splashing. It is especially important to keep the
  water out of mouth, eyes and nose.
- If there has been personal exposure to the flood waters, bathe or shower thoroughly with soap and water and wash all contaminated clothing in hot water and a detergent.
- Make sure tetanus immunization is up to date for any person who is exposed to flood waters. For most adults, having received a tetanus booster within the past 10 years is adequate. For children, parents should check with their pediatrician to make sure the tetanus vaccination is up to date.
- General use of immune globulin (IG) injections for hepatitis A is not being recommended. However, individuals
  should consult with their primary health care provider if they have significant underlying health problems or are
  immunocompromised (e.g., on steroid therapy, chemotherapy for cancer, has HIV or some other disease that
  weakens the immune system).
- Health care providers should be contacted if an individual becomes ill with fever, nausea, vomiting or diarrhea
  after exposure to possibly contaminated flood waters.

#### Wells

If the area over a well is under flood water, the recommended procedure for disinfecting is:

- 1. pour a solution of three gallons of water and one pint of 3% to 6% commercial bleach directly into the well,
- open all faucets until there is an odor of chlorine apparent and then close all faucets for ten hours to allow the bleach to kill bacteria present in the pipes, storage tank or well,
- 3. open all faucets and let the water run until the odor and taste of bleach have disappeared,
- have a sample of water, taken 24 hours after disinfecting, tested at a certified laboratory to determine that the
  water is suitable for use.

Note: This procedure results in a high level of chorine so the water should not be used for drinking, cooking, or watering livestock until the chlorine odor and taste is no longer apparent. Use of bottled water or boiling water is suggested if citizens are unsure of the purity of their water supply.

## Homes and buildings

Flooded buildings should be pumped out and disinfected. After the water is pumped out, solid wastes should be disposed of in a functioning sewage disposal system or sealed in plastic bags for ultimate disposal in an approved landfill. All flooded floor and wall surfaces should be washed with a solution of two capfuls of household bleach for each gallon of water. Any household articles affected by floodwaters should be washed with the same solution. Carpeting, mattresses and upholstered furniture should be disposed of or cleaned and disinfected by a professional cleaner.

## Yards

Yards that have been contaminated by flooded sewage systems should be disinfected by a liberal application of lime. Children and animals should be kept away from limed areas until the lime is no longer visible.

## Power Failure/Food Safety

Heavy rain can mean a disruption in electrical and gas service and the availability of potable water. When power goes off in the refrigerator, you can normally expect food inside to stay safely cold for 4 to 6 hours, depending on how warm your kitchen is. Here are some additional guidelines:

Add a block of ice to the refrigerator if the electricity is off longer than 4-6 hours. As this ice melts, the water

- may saturate food packages. Keep packages out of the water as it drains.
- High protein foods (dairy products, meat, fish, and poultry) should be consumed as soon as possible if power is
  not restored immediately. They cannot be stored safely at room temperature.
- Fruits and vegetables can be kept safely at room temperature until there are obvious signs of spoilage.
- A fully stocked freezer will keep food frozen 2 days if the door remains closed. A half-full freezer can keep foods frozen about one day.
- If you are purchasing perishable foods from a market in an area that has been affected by power outages, make sure that the cold foods have been kept below 45 degrees F. and that hot foods have been kept above 140 degrees

Generally, do not eat any food that has come in contact with floodwater, especially root and garden vegetables. Citrus fruits should be washed well, sanitized in a chlorine solution and peeled before eating. Apples and other fruits should also be cooked before eating. Carefully examine all canned and bottled goods, these are usually not affected but should be washed thoroughly with approved drinking water and a mild disinfecting solution and rinsed prior to opening and use. Canned or powdered milk may be substituted for fresh milk.

## **Injury Prevention**

Hazards of floods continue to exist after the water recedes as workers, volunteers and homeowners begin to clean up. There are many hazards besides drowning which may cause serious injury. Some basic cautions should be taken as follows.

Electrical hazards: When entering flooded areas, be aware of electrical hazards. Don't touch any electrical equipment unless you are absolutely sure it is properly grounded or that the power is off. Also, don't operate any electrical equipment that is not specifically designed for use in wet locations. The water in which you are standing will provide a path for the electricity if you touch any equipment that is not properly grounded. That path will go through you too.

Never handle a downed power line. If clearing or other work must be performed near a downed power line, contact the utility company. Extreme caution is necessary when moving ladders and other equipment near overhead power lines to avoid inadvertent contact.

Carbon Monoxide:Flood cleanup activities may involve the use of gasoline- or diesel-powered pumps, generators, and pressure washers. Because these devices release carbon monoxide, a deadly, colorless, odorless gas, operate all gasoline-powered devices outdoors and never bring them indoors.

Back Injuries: Get help to move heavy objects. Working on slippery surfaces can also cause injuries. Make sure you have a firm footing before lifting. Make sure you have a clear path for carrying heavy objects.

Heavy Equipment: Never operate equipment that you have not been adequately trained to use. When crews are working around heavy equipment, site control is critical. During an emergency, people will not pay attention to back-up alarms. Do not work around heavy equipment unless it is absolutely necessary. Have as few pedestrians in the area as possible.

Structural Instability: Never assume that water-damaged structures or ground are stable. Soil is also easily destabilized in wet conditions and may collapse without warning.

Additional questions about proper disinfection procedures and other potential health problems related to the storm can be directed to the local Board of Health in each city or town.

This information is provided by the Community Sanitation Program within the Department of Public Health.

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